Financial Instability and the Decline (?) of Banking: Public Policy Implications

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I. Definition of the Problem

Banking plays two roles in a modern capitalist economy: it supplies the means of payments and it channels resources into the capital development of the economy. On both scores these banking functions are being performed to a decreasing extent by organizations that are chartered as banks and it seems, caeterus paribus, that the trend will continue.

These developments suggest that the role in the economy of government organizations (Central Banks, broadly defined)--to supervise, regulate, and examine banks; to "control" the growth of bank money; and to assure that those bank liabilities that function as part of the payments mechanism are always available at par--needs to be reviewed. The "declining" role of banks has significance for the efficacy of monetary policy operations. The channels by which Federal Reserve operations affect the economy may no longer be by changing the availability or cost of financing, but rather by affecting uncertainty: by affecting the evaluation by portfolio managers of the viability of enterprises and the stability of markets. When Central Bank operations affect the evaluation of uncertainty by financial market agents,

market reactions will often be out of line with the size of the operations.[1]

The decrease in the weight of banks in financing the capital development of the economy tends to increase the significance of the Securities and Exchange Commission relative to that of the Federal Reserve System. That some major organizations that are chartered as commercial banks operate more like investment banks is an issue bond rating firms are facing, even as our regulatory structure for banks remains frozen and unchanging. The policy problem that emerges from the decline in the relative importance of institutions chartered as banks is whether the existing institutional structure of regulation and supervision of financial institutions needs to be changed in a serious way.

In general, the discourse on economic policy takes place on two "planes." One is that of the day-to-day operations of the "authorities" and the rules, if any, that should guide them. The second plane is that of the legislation (and administrative decisions) that affects the structure and operations of banking and financial markets, and the government involvement in setting rules that constrain and contain banking and financial markets. This paper concentrates on policy on the second "legislating institutions and usages" plane.

II. Theoretical Background

Every economic policy argument reflects a maintained economic theory. It behooves anyone who analyzes and advocates economic policy to make "where he is coming from" clear. This is especially true if the maintained theory of the analyst is significantly different from the conventional or orthodox theory of the day.

This comment is written from the perspective of the financial instability hypothesis interpretation of The General Theory of Keynes. This interpretation holds that in The General Theory Keynes set out the foundations of an investment theory of business cycles and a financial theory of investment for capitalist economies. Interactions among processes that determine investment demand, financing conditions, aggregate demand, and the distribution of income determine the path through time of the economy.

This Keynesian view differs quite radically from the orthodox "neo-classical" economic theory, which leads to propositions about the properties of the static equilibrium of an abstract economy that is fully specified by production functions, utility functions over "real variables", and maximizing behavior. One proposition of the neo-classical theory is that money is neutral. Keynes described the effort that went into the creation of The General Theory as a process of escaping ". . . from the confusions of the Quantity Theory, which once entangled me."[2]

In the theory Keynes developed, upon which the financial instability hypothesis is built, money and finance are in general not neutral. In particular, changes in monetary and financial institutions will affect the path of the economy through time. This non-neutrality of money is not the result of special circumstances such as rigid wages, but rather because money enters in quite different ways into the determination of the money prices of current outputs and the money price of capital assets.[3]

In the financial instability hypothesis, the economy is viewed as a set of interacting, interdependent processes that generate the path of the pertinent economic variables through real time. The results of multi-market interactions are most

often tranquil, but from time to time the cumulative effect of the interacting processes generates turbulent conditions as well as incoherent behavior. This theory holds that periods of incoherent behavior occur as a natural outcome of the interactions between flows of income, payment flows due to financial commitments and the prices of assets as determined in markets. These interactions reflect the essential characteristic of a capitalist economy, that it is simultaneously an income generating system and a financial system.[4]

Economic turbulence and incoherence are associated with both deep depressions and severe inflations: they lead to serious systemic deviations of output from potential output. Whereas the orthodox theory finds that decentralized market processes lead to optimums, the financial instability hypothesis holds that the outcomes of capitalist market processes are often seriously flawed. However, the full effect of these flaws, such as deep and long depressions, can be contained by apt economic policies.[5]

In the financial instability hypothesis, business cycles mainly result from interactions between payment commitments, which arise in the process of financing investments and positions in capital assets, and the flows of gross capital incomes, which are determined by the structure of aggregate demand: business cycles are endogenous in capitalist economies. Gross capital incomes can be either more than sufficient, sufficient, or insufficient to fulfill payment commitments made during prior financings. In the simple skeletal case, investment spending determines the cash flows available for validating the prices paid for capital assets and financial instruments, as well as fulfilling commitments embodied in liability structures which were entered into in order to finance investments and positions in assets.

In our complex world, households, government units, and foreign governments and enterprises have outstanding debts, and debt-finance some of their activities internationally. They, too, need to validate debts inherited from the past, even as they finance some current demands for goods and services with new debts.[6]

III Debt Deflations

The financial instability hypothesis as an interpretation of Keynes starts with two observations:

1. The General Theory was written during and shortly after the great contraction of the American Economy that culminated in the collapse of the United States' banking system in the winter of 1932-33.[7]
2. Keynes was familiar with Irving Fisher's Debt Deflation Theory of Great Depressions.[8]

In Fisher's argument, overindebtedness is an initial condition for a debt deflation. This arises out of the changes in the way investment and positions in capital assets are financed as the economy enjoys an extended period of good times. Institutional changes, in the form of new institutions, new instruments, and market innovations, are one aspect of the way financing changes over extended periods of good times. In addition, as is especially evident these days, financial practices adjust to new technologies of communicating, computing, and access to files.

Fisher did not explain how overindebtedness developed. It is now clear that over an extended period of good times, during

which the use of debt leads to well-advertised gains, prior wariness of the use of debt attenuates. The subjective evaluation of the likelihood of project failure diminishes even as the margin of safety in liability structures diminishes, as ever-larger proportions of expected cash flows are pledged by outstanding contracts to service debts. Subjective views of the uncertainty being carried decrease even as the closer articulation of debt payments and the income to fund these payments increases the objective chances of contracts not being fulfilled.

Impact of the Great Depression

After 1933, when the pieces left behind by the great contraction of 1929-33 had to be picked up and put together, the current interpretation of the great depression emphasized weaknesses in the financial structure, running all the way from the information that corporations provided to their investors and potential investors to the organization and powers of the Federal Reserve System.

The Federal Reserve System was created in the aftermath of the panic of 1907. One motive for its founding was to make future financial crashes impossible. As the Federal Reserve was unable to stem the wave of insolvency of banks and firms over the 1929-33 period, a consensus developed that a retooling of the Government's interface with the banking and financial system was needed: some device other than the Federal Reserve's discount window had to be put in place to contain solvency crises.

The banking and financial legislation of the era of the Great Depression had two phases: first came emergency provisions and then, after a period of study and debate, reform: the setting in place of a "permanent" structure. The second phase took place

mainly in 1935 and 1936. The object of reform was to set in place a structure so that a financial collapse leading to a great depression could not happen again.[9]

IV. The Reforms of the 1930's

Much of the economic history of the United States could be written in terms of attempts to get money right. After a particular monetary, banking, and financing structure had failed, either economically or politically, a new structure was put in place. This history of reform and subsequent failure, followed by another round of reform, reflects the two not completely compatible requirements placed upon the monetary and banking system: to provide a safe and sound medium of exchange, and to furnish channels for the financing of the capital development of the economy.

Compartmentalization and Transparency

Two principles, compartmentalization and transparency, can be said to have governed the legislation in the mid-1930's that reformed the private monetary, banking, and financial systems and the government's regulatory structure. The basic structure set in place in the mid-1930's is still largely in place.

Compartmentalization means that the financial industry is divided into compartments, within which special-purpose or limited-domain institutions have protected market positions in particular types of financing, in the financing of particular industries, or in the provision of particular types of assets for other units. One aspect of compartmentalization is the separation of commercial from investment banking, what is commonly referred to as Glass-Steagall act. In addition, special

financing arrangements were put in place for home ownership, agricultural credit, exports, and rural electrification. The Reconstruction Finance Corporation, a government investment bank, supervised the refinancing of banks, railroads, and other industries, and acted as the financing backstop for a myriad of government resource-development programs.

In the same spate of legislation the Federal Reserve System was reorganized. The real bills doctrine was removed from the rules that determined the currency supply and access to Federal Reserve credit. Furthermore, government debt became eligible as an asset to offset Federal Reserve currency liabilities.

Deposit insurers, a new set of agencies. were created to take over the responsibilities for assuring that bank deposits were always available at par from the Federal Reserve. The various deposit insurance funds carried an implicit Government endorsement or guarantee of their commitments, up to limits set by Congress. One principle of the initial legislation, which was not honored in our recent experience, was that small deposits were, and large deposits were not, so guaranteed.

The doctrine of transparency really reflects a recognition that the United States is a capitalist economy in which the corporate form of organizing business dominates. The transparency principle holds that truthful information, on the financial condition of corporations and of activity in those markets in which initial underwriting takes place and in which "second hand" securities are sold, was to be publicly available. In addition, the markets in which financial instruments were sold and bought were to be free of manipulation, either by market makers, corporate management, or third parties.

The transparency principle is necessary for the operation of a market- rather than an institution-based financial system.

Revelations of scandals in investment banking, combined with the losses of investors as the Dow Jones fell to some 15% of its pre crash value, meant that by 1933 public's confidence in the integrity of investment markets and in the wisdom in participating was low. The revival of confidence in banks and saving institutions was facilitated by Federal government deposit insurance.

There was no possibility of a similar government intervention to guarantee the value of other assets. Revival of confidence in market-based debt and equity financing required some guaranty of the integrity of corporate management and financial markets. The New Deal legislation founding the Securities and Exchange Commission set standards for corporate reporting and governance, for the information that needs to accompany a public security offering, and for the operations of (and the flow of information from) second-hand markets for securities. One difference between economies with "universal banking" and economies with a division between what banks finance and what markets finance is in the public confidence in the integrity of markets and corporate governance. The securities and exchange legislation may well be one of the most successful reform efforts of the New Deal era: without it, today's market oriented financial system would not be feasible.

Loan officers of banks are professionals, skilled in the evaluation of privately submitted and often confidential information about the operations of businesses, households, and government units that require financing. The loan officer joke, to the effect that he has never seen a pro forma that he did not like, accurately reflects the loan officer process, which seeks to transform the optimistic views of profit expectations put forth by potential borrowers into realistic expectations which

can be submitted to and endorsed by loan oversight committees of the bank. The underwriting process, combined with the input of security analysts, plays a similar role for publicly traded securities.[10]

The remark about pro formas cited earlier identifies the role of loan officers in the chain of financing: loan officers are the designated skeptics of the economy, who nevertheless make their living by accepting risks that they understand. In market-based financing, underwriting and security analysts are assumed to play roles similar to that of banker, but the continuing commitment to both the borrower and the lender that often characterize a bank's relations with borrowers and depositors is in general lacking in market-based financing arrangements.

The 1930s reorganization

When the Federal Reserve was created after the crisis of 1907 the belief was that the problem of the instability of the banking system was put to rest. As the Federal Reserve was not able to take an equity position in an otherwise bankrupt bank, the Federal Reserve was unable to contain the solvency crisis of the banking system that climaxed in 1933. The resolution of the crisis of 1933 involved an infusion of equity by the Reconstruction Finance Corporation into banks that were bankrupt on a mark-to-market basis.

The creation of federal deposit insurance institutions for commercial banks, savings and loan organizations, and credit unions diluted the authority of the Federal Reserve System. A natural and normal result of deposit insurance is the setting of standards for coverage and a mechanism of supervision, regulation, and examination, which assures the insurer that the

insured conforms to set standards. Regulation, supervision, and examination are natural functions of an insuring authority.

The original Federal Reserve act based the reserves of member banks on bank rediscounting of eligible paper at the discount window of the district Federal Reserve Banks. Rediscounting was not a lender-of-last-resort activity reserved for a crisis, it was the mechanism by which part of the normal reserve base of banks was brought into being. By being the channel through which the demand for reserves by banks led to the creation of reserves, the discount window made the ability of banks to lend responsive to the needs of trade. In the original Federal Reserve act bank reserves were endogenously determined.

The underlying theory of the original act was that the responsiveness of the banking system to the needs of trade (made possible by the reserve base of banks being endogenously determined by the rediscounting of eligible paper at the district Federal Reserve Banks) combined with the Federal Reserve's generalized oversight of the banking system, would result in a banking and financing structure that was safe and secure, and which also facilitated the capital development of the economy. Changes in the posted rediscount rate at a District Bank were to take place only as the Bank suffered a loss of gold, either through the foreign exchanges or through an internal drain. Federal Reserve actions were not to try to fight projected inflation or otherwise manage the economy.

In the original structure, the District Banks were lenders to member banks. As lenders, the District Banks had a right to information about the prudence of their member banks who were regular borrowers. The use of the discount window as a normal source of financing by member banks legitimated the regulation,

supervision, and examination of member banks by the Federal Reserve.

The Federal Reserve had been created because in the first decade of the century the government debt was too small to be the basis of a currency supply and a banking system that responded to the needs of trade, i.e., that facilitated the capital development of the economy. Making government debt eligible as an asset for the note issuing department of the Federal Reserve Banks was viewed as an emergency provision when it was first introduced during the crisis of 1932, and not as a change in the normal operating procedure. Aside from periods of crisis, the Federal Reserve System's interaction with the economy was still expected to be based on the discount window.

The bank currency of the United States under the National Banking Act was based upon the Government debt that banks deposited with the Comptroller of the Currency. The fiscal policy of the United States after the Civil War led to a shortage of government debt which, in turn, meant that the creation of bank money and the financing available from the banking system were not responsive to the needs of trade.[11]

Legislation of 1932-35, which allowed the use of government debt as asset offsets for currency, did not abolish the rediscount facilities at the District Banks. The expectation was that after recovery a resumption of fiscal orthodoxy would once again make government debt scarce. This would enable the discount window to resume its rightful place as the source of the banking system's response to the needs of trade.

This expectation was falsified by the enormous growth of government debt during the Second World War. In spite of the Korean, Vietnam, and Cold wars, over the 1946-1980 period government debt as a percentage of GDP fell, ratifying the

expectations of the 1930's. As a result of the destruction of the federal fiscal system following the election of 1980, government debt relative to GNP increased dramatically. Today, and for the foreseeable future, policy dealing with the structure of government supervision, regulation, and examination of financial institutions has to reflect expectations that a government-debt-based money supply will be the rule.[12]

Whether the structure of the Federal Reserve System that created district Reserve Banks to process eligible paper and to create thereby the reserve base for commercial banks is an apt structure for a Central Bank that operates by way of open market operations has never been faced. There may very well be a mismatch between the structure of the Federal Reserve System and the manner in which it interacts with the economy: a discount window central bank is different than an open market operations central bank.

V. Today's Capitalism

The financial systems of today's capitalisms are not the financial systems of 1907 or of 1936. Over the half-century since the end of World War II there has not been a traumatic collapse of financial markets, such as had often occurred during the century prior to 1940. Historically, such collapses had marked the beginning of a deep and long-lasting depression. One reason for this change is that the reserves are now based upon government debt. This means that a decline in reserves and in the supply of money need no longer be a result of a decline in business activity which lowers the demand for bank accommodations. Furthermore, with government debt available for bank portfolios the reserve base and bank deposits will be

sustained even if bank lending to business and households decreases.

An additional and equally important reason for the absence of a deep depression is that in a big-government capitalism a fall in investment does not mean that capital incomes collapse, which is what normally happened in a deep recession or depression. This is so because government deficits are the equivalent of investment in sustaining aggregate capital incomes.[13]

Stabilization policy

Stabilization policy is effective as it stabilizes aggregate profits. The great collapse of asset values in the 1930's occurred primarily because capital incomes (current, recent, and expected) had fallen and only secondarily because the discounting factor had risen.[14] The increased preference for liquidity decreases the capitalization rate for capital assets and equities when financial traumas occur, but in the small-government capitalism, such as that which ruled in 1929-33, the numerators in the present-value formula (the capital asset pricing relation) first fell slightly, and then precipitously, as investment tapered off and then collapsed. The double whammy of increased liquidity preference and decreased profits was responsible for the fall in asset values being greater than the fall in the consumer price level and in an index of the wages of employed workers.

In our recent experience the main stabilizing device that prevented the financial fiascos of the late 1980's and early 1990's from turning into a depression was the government's deficit. One new aspect of the economy is the growth of managed monies in the form of pension and mutual funds. These funds are

contingent value instruments. The day-to-day value of these funds depends upon a daily marking to market of the portfolios. A run from these funds will lower asset values, for the need to liquidate assets to satisfy redemptions is likely to force the market price of securities down.

In an earlier epoch, when bank "fixed-dollar" liabilities were a main asset of households, a bank failure would lead to frozen assets. Depositors would receive partial payments as the assets in a failed bank would be liquidated. Even though there is no margin of safety, such as is provided by bank equity, for the asset value of mutual funds, there is also no danger that the front of the line can withdraw 100% of a deposit but those who are further back receive only the value that can be achieved through the time-consuming process of liquidation.

A stabilization policy that relies mainly upon government deficits to sustain profits and stimulate private investment, and government surpluses to constrain profits, prices, and exuberant investment, requires the discipline of a fiscal policy that does not allow the quality of government debt to be compromised. This implies that at normal times the fiscal posture of the government leads to a substantially smaller rate of increase of outstanding debt than of gross domestic product, but when GDP falls by a significant amount from the "full-employment level" then the rate of increase of government debt becomes substantially greater than that of GDP. The tight rein that such an income-sensitive fiscal policy imposes acts as a significant constraint upon inflation.

Such a big-government tight fiscal policy regime allows monetary policy to be relatively passive. In big-government capitalism, monetary policy has only one arrow to fire in constraining an exuberant expansion. It can make financing through banks relatively scarce and very expensive; i.e.,

monetary policy is effective with a slack fiscal posture only as it induces a crunch. A policy posture that aims at portfolio conservatism by creating crunches and threats of debt deflations will lower economic growth by lowering of the overall ratio of attained GDP to potential GDP.[15]

VI. Policy

As my colleague Ronnie J. Phillips recently pointed out, in 1935 few believed that the agenda of banking reform was completed.[16] One unfinished item on the agenda was to clean up bank examination by unifying examination under the independent government corporation, the FDIC. As Phillips reports, the argument was that the FDIC and the Treasury (as the guarantor of the ability of the FDIC to pay off depositors as necessary) had resources at hazard in the guarantee of the nominal value of bank deposits. This made them the appropriate organizations to carry out bank examination.

Liquidity and Solvency Crises

In 1935 only one "solvency" crisis, that of 1933, had occurred since the Federal Reserve System was in place. In that experience, the Federal Reserve System had been unable to prevent the collapse of the banking and financial system. Furthermore, the reopening of the banks after the holiday was under the auspices of the Reconstruction Finance Corporation, which was able to supply equity funds.

We now have had a second experience with a solvency crisis. Once again the Federal Reserve was not a main player in paying off and sustaining bank and savings and loan association

liabilities at par. The major placers were the insurance funds and the Treasury.

Whereas the Federal Reserve has been the main player in inducing and containing liquidity crises the Federal Reserve was not the main player in resolving the solvency crises of 1929-33 and 1988-92. The Federal Reserve has not been able to contain and offset crises that were due to a plethora of non-performing assets on the books of banks and financial institutions.

The resolution of solvency crises, which are characterized by non-performing assets, requires an equity infusion. This requires that either a government investment bank infuses equity into negative net worth institutions, or a government "liquidator" puts up enough "equity" funds into failed institutions so that the guaranteed or insured liabilities are paid off at par.

The "government investment bank" route leads to the continued operation of the failed bank, and often of the debtors whose liabilities are the non performing assets of the failed bank. For both the bank and the debtor, the equity infusion often leads to the treatment of the debtor whose liabilities are not performing as a work-out situation. On both the bank and the bank customer's side the government investment bank route leaves valuable organizations intact, even if the management responsible for the non-performing assets is replaced.

The "government liquidator" route pays off depositors, closes down the failed bank, forecloses on debtors, and proceeds to sell the assets of the failed bank and bank customers as rapidly as is deemed feasible. The "government investment bank" work-out route may be a more effective way to deal with a crisis that is due to non-performing assets than a "liquidator" route.

In the aftermath of the bank holiday, the Reconstruction Finance Corporation placed equity in some 1/3 of the closed banks (1/2 of the banks that reopened). As recovery took place, the equity injection by the RFC was undone, either by the sale of the equity interest in the market or by a repurchase of the RFC's investment out of retained earnings. On the whole, the investments in failed banks yielded sufficient funds so that the costs to the government were nil: no permanent increase in the government debt occurred because of the recapitalization exercise.

It seems as if there will be a permanent increase in the government's dead weight debt due to the costs of the bankruptcies of savings and loan associations and banks in the 1988-1992 period. It is worth investigating whether a permanent government investment bank, such as the Reconstruction Finance Corporation, is a desirable feature for an economy where solvency crises are likely to occur.17

100% Money, or The National Banking Act Redux

The National Banking Act provided for a currency that was based upon United States Government bonds that the currency-issuing banks deposited at the Office of the Comptroller. Today our currency is based upon Government bonds that are held by the Federal Reserve System. The "great experiment" of basing the currency supply upon private debts monetized by the Federal Reserve System was terminated by the combination of the Great Depression, the great war, and the attenuation of the revenue base of the Federal Government in the 1980's.

Furthermore, the government debt is big enough so that the deposit liabilities of the commercial and savings banks could be offset by government bonds. We can now have a banking system in

which the banks hold interest-bearing reserves at the Federal Reserve Banks equal to 100% of their deposits, subject to check, and the Federal Reserve Banks hold government bonds to offset their currency and bank reserve liabilities. This would give us a monetary system in which currency and deposits are fully equivalent in the assets by which they are offset on the books of commercial and Federal Reserve banks. The conditions for 100% money are satisfied.[18]

We are rapidly moving towards an economy where money will take on new forms. We not only make purchases by electronically setting up debits on various credit and payment cards, but we can expect eexpect the currency in our pockets soon to take the form form of a smart card with an encoded value, which we will run down by transferring credits by way of smart "cash registers" to the vendor's account.

As they transfer purchasing power from from the account of one agent to that of another, payment systems use resources. The great innovation in the payment and credit card revolution was the vendor's discount as the way to pay the costs of the payments system. One way to pay for the payments system in a world of 100% money is to use the interest on the government's sebt owned by the banking system to cover the costs of the system. But this would mean that the safety and security of that goes with a default-free income-yielding asset would not be readily available to the general public. The alternative would be for the banks to pay a competetive rate on deposits and to put in place a fee-for-services system to pay for check-clearing and the use of the electronic payment system. There may be no issue of principle in the choice, except that a fee-for-services system can yield an open-access system, which would treat large and small asset owners equally. Such a consideration may swing the choice in

favor of a combination of fees for services and the vendor's discount to pay the costs of the payments system.

One aspect of the 100% money schemes was that debt financing of businesses and households was to be divorced from the payments systems and the provision of instruments that are both free of default and always have a fixed nominal value. This can be accomplished by making contingent value assets the standard for the indirect holding by households of paper that finances business and household debts. Current trends are running in favor of mutual funds becoming the principal vehicle by which households own business equities and debts. These fund liabilities have values based upon the market value of a portfolio. This mutual fund financing technique is now mainly used for instruments that are purchased on the basis of generally available information.

Banks, through their loan officer function, are specialists in making loans on the basis of their "hard reading" of private information, which they obtain in the process of deciding whether and on what terms to accommodate a potential borrowing client. As a substitute for bank lending, such loans can be the province of special mutual funds that break down the flow of funds from business and household financing into tranches, such that there is a fixed-income portion with a market value that is protected and a variable-income tranche that "protects" the fixed-income and value tranche. These funds would be so structured that the variable-income portion would have a high expected return but would also absorb the first, say, 10% of losses due to non-performing assets: interest rate risk could be finessed by making all credits floating-rate credits.

Thus, as the 21st century is about to be ushered in, an idea which was on the table during the 1930's discussion of reform can

once again be on the table. One virtue of the 100% money scheme is that it separates the two functions that the monetary and banking system has to perform: the provision of a safe and secure means of payments, and the capital development of the economy. By separating these functions it makes us aware that an economy can have too little, as well as too much, government debt.

We now are in a position to realize the dual set-up of 100% money: financing the capital development of the economy by contingent-valued liabilities such as mutual funds, and a payments mechanism that is based upon a portfolio of government bonds that is held by the authority responsible for the payment system. The weakness of the mutual fund way of financing business is that the position-taker, the manager of a mutual fund, does not hazard his capital in order to protect the fund holders against loss of principal. A surrogate for bank capital in the form of a high-risk, high-expected-return tranche in the portfolio will need to be developed.

In a capitalist world, other people's money is put at risk by corporate managements and portfolio managers of various kinds. This is true to a greater extent now than ever before, because of the wider spread of wealth, albeit mostly in small accumulations, that has been realized. One way of protecting today's asset owners is by broad public information widely disseminated: by transparency.

Compartmentalization and Transparency for the 21st Century

Like every application of principles, compartmentalization and transparency need to be adjusted for the realities of institutions and usages. The compartmentalization of institutions by function, so prominent in the 1935 structure, has largely been eroded. As we prepare for the 21st century we have

to adjust the still-valid concepts of compartmentalization and transparency to the technology of the 21st century and our understanding of how our economy functions.

The securitization of home mortgages and automobile loans, an adjustment that reflected the increase in the weight of mutual and pension funds as the proximate holders of market instruments reflecting primary loans, has changed the operations of both savings banks and consumer sales finance companies. Furthermore, the holding company format that now allows commercial banks and mutual funds to be under the same corporate umbrella, and which we can expect will be opened to allow commercial and investment banking to co-exist under a holding company format, has virtually erased the functional segmentation of commercial and investment banking.

Legislation and administrative decisions that eliminate most of the barriers to nation wide branch banking are now being implemented. This paves the way for the elimination of geographical segmentation.

One element in the stagnation of the British economy over the past century has been the ever-greater concentration of banking into a small number of national branch systems, even as a rich mix of fringe banking organizations, such as exist in Germany and Italy, never arose. The prudent banker rule of thumb, often made part of the regulatory structure, provides for the distribution of credits so that no more than 10% or 15% of equity (in principle capital, retained earnings, and undistributed profits) can be allocated to any one credit.

This 10%-to-15%-of-capital rule determines the natural loan size habitat of a banking group. For example, an eight-percent capital-to-total assets rule means that a 100 million-dollar bank would have 8 million dollars in capital. The maximum credit line

of such an institution would be from $800,000 to $1,200,000. In the American scene as it now is, any bank with $1,000,000 or less as its maximum credit line is a bank for smaller business. By the same rule, a 1 billion-dollar bank will have an 80 million-dollar capital and a maximum credit line of 8 to 12 million dollars, and a 100 billion-dollar bank would have a maximum credit line of 800 million to 1,200 million dollars.

The opening of the gates to nationwide branch banking will see an amalgamation of smaller banks into state, regional, and national banks. Every case of amalgamation will increase the capital, and therefore the maximum line of credit that can be given to any one customer. A movement of banks to higher natural habitats will take place. The progress to a small number of banks, each one of which is too big to fail, with maximum credit lines so large that the conditions of supply of credit to large borrowers will improve relative to the conditions of supply of credit to small borrowers, seems to be a most likely outcome of what is now taking place.

A series of rules that segments banking by bank size seems in order if small businesses are to receive adequate financing as the consolidation proceeds. The idea of special rules as well as special support organizations for community banks needs to be explored.[19]

VII. A Modest Proposal

The time has come to open a national inquiry into the structure of the banking and financial system. The radical changes now underway in technology, computing, and communication mean that much of what we now have may be obsolete. The sluggish economy of the past decades, combined with the apparent

reluctance of the Federal Reserve to give full employment a chance, can mean that our financing structures are not consistent with the needs of a progressive democracy.

In the past, serious changes were the result of serious public inquiries. I suggest that enough is amiss in our financial and banking structures that it is time to go back to the drawing board and determine what the monetary, financial, and financing arrangements should be in the 21st century. A late 20th century National Monetary Commission should be on the public policy agenda.

ENDNOTES

1. The strong reaction of interests rates and financial markets after the modest early-1994 Federal Reserve actions may well reflect an increase in uncertainty by agents of how these actions will work their way through the now more-complex financial markets. For an argument about how monetary policy operates by affecting uncertainty see Minsky, Hyman P., "The New Uses of Monetary Powers" (179-191) in Minsky, Hyman P. (1982) "*Can It Happen Again?*", Armonk, N.Y.: M.E. Sharpe.

2. Introduction to the French edition of Keynes, John Maynard, (1973) *The General Theory of Employment Interest and Money*, as reprinted in Volume VII of *Collected Works of John Maynard Keynes*, London and Basington: Macmillan.

3. This two-price-level interpretation of Keynes's non-neutrality of money is stated in Minsky, Hyman P. (1975), *John Maynard Keynes*, Columbia University Press, as well as in (1982) *Stabilizing an Unstable Economy*, Yale University Press. One way of making the idea of the two price levels clear is to note that a capitalist economy has both a "CPI" and a "Dow Jones".

4. Turbulence may be of fairly long duration, but incoherence is almost always of short duration. In the turbulent great contraction of 1929-33, incoherence dominated no more than the last 10 weeks before the inauguration of Franklin Roosevelt. Decisive action by the government over the first hundred days of Roosevelt's term, combined with promises of reforms to come, ended the incoherence.

5. The perspective on our economy to which the financial instability interpretation of Keynes leads has much in common with the stress upon the evolutionary properties of capitalist economies that enlightened the work of economists, such as Schumpeter and the American institutionalists, who were prominent in the first half of this century.

6. In the core case, profits equals investment. In the world as it is, gross capital income equals investment plus the government deficit minus the international deficit of trade, with

corrections for savings out of labor income and consumption financed by capital income.

7. Keynes visited the University of Chicago in 1931 to participate in the Harris Foundation lectures on *Unemployment as a World Problem*. While in Chicago he noted that a preference for liquidity was rampant among banks, businesses, and persons. It seems that Keynes came to Chicago to sell the analysis of his quantity-theoretic *Treatise on Money*, and left Chicago with the liquidity preference germ of his revolutionary *The General Theory*.

8. Fisher's article appeared in the first (1993) volume of *Econometrica*.

9. One aspect of the process of reform was the assembly, in the summer of 1934, by Jacob Viner of a gaggle of bright young economists in the Treasury Department: they were labeled Viner's Freshmen. Their charge was to design a banking and financial system from scratch. One of these young economists was Laughlin Currie; another was Albert Hart. Both of them were friendly toward 100% money, a doctrine usually associated with Henry Simons of the University of Chicago. See Phillips, Ronnie J. (1994 forthcoming), *The Chicago Plan and New Deal Banking Reform*, Armonk, N.Y.: M.E. Sharpe.

10. William Janeway's law, "Entrepreneurs lie," is a parallel statement about the determination of whether a project is bankable. The importance of the institution of "security analysis" for the functioning of a transparent market based financial system is one reason why it is easier for a newly capitalist economy to replicate a universal banking system than a market based financial system.

11. The original Federal Reserve act replaced a currency that monetized government debt with one that monetized private debts (and gold). The period of the National Banking Act (1863 to 1913) was characterized by falling prices. The William Jennings Bryan "Cross of Gold" speech was a response to the chronic deflation of the post- Civil War era.

12. If the trend decline in the ratio of government debt to gross domestic product of 1946-1980 had continued through 1993, we would now be concerned about the shortage of government debt to satisfy the needs of the financial system, and we would be

debating what the structure should be of a banking and financial system in which the currency and the reserve base for deposits furnished by the Federal Reserve would reflect private obligations that the Federal Reserve obtains either from an open market or through the discount window.

13. For the concept of a contained depression see Levy, S Jay, and David Levy (1991), *Outlook for the 1990's: The Contained Depression*, Jerome Levy Economics Institute.

For an explication of the relations between the composition of aggregate demand and profits see Levy, S Jay, and David Levy (1983) *Profits and the Future of the American Economy*, New York: Harper and Row, and Minsky, Hyman P. (1986), *Stabilizing an Unstable Economy*, Yale University Press.

14. Recall that over 1929-33 the price level of current output and the wage level of employed workers fell by about 1/3; the Dow Jones, the second price level, fell by some 85%.

15. Using crunches to contain demand is a form of policy brinkmanship. Crunches succeed as businessmen and bankers believe that their survival is at stake. The danger that the central bank will carry the crunch too far and set off a debt deflation is always present.

16. Phillips, Ronnie J. (1994), "New Deal's Unfinished Work: Merging the bank regulators", *The American Banker*, April 18.

17. In the light of the French and Italian experience with government investment banks, it is difficult to recommend a government investment bank except for the possibility that in the United States the activities of this bank will tend to be transparent.

18. Some of the main references for 100% money are:

Hart, Albert (1935), "'The Chicago Plan' for Banking Reform," *Review of Economics and Statistics* 2: 104-116.

Fisher, Irving (1945), *100% Money*, 3rd Edition, New Haven: The City Printing Company (First Edition 1935).

Simons, Henry, et al (1933) "Banking and Currency Reform", Manuscript Reprinted in Warren Samuels, ed., *Research in the History of Economic Thought and Methodology*, Archival Supplement, Volume 4, Greenwich, Conn.: Jai Press, Forthcoming.

The general reference to Henry Simons is *Economic Policy for a Free Society,* Chicago: the University of Chicago Press.

19. Minsky, Hyman P., Dimitri B Papadimitriou, Ronnie Phillips, and L. Randall Wray (1993) "Community Development Banking:" *Public Policy Brief* no.3, The Jerome Levy Economics Institute.

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